STATE OF NEVADA COMMISSION ON MINERAL RESOURCES

DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 | Fax (775) 684-7052

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MAR 1 3 2015

Division of Minerals

5/27/2014 LV

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(Application must be accompanied by \$200 permit fee. Submit proposed drilling program with this application.) Company/Operator MAKOIL INV Send permit to: Street/ PO Box HC 76 BOX 10300 State NV City TONOPAH Telephone 775-863-0300 Zip 89049 Lease name MUNSON RANCH Split Estate? Yes within the NE Well No. 12-23X Q SW Q WELL LOCATION M.D.B.M. Sec 12 , T. 9N ,R. 56E E (NAD83 Datum) UTM Northing N: UTM Easting Field TRAP SPRING County NYE feet from (N) (S) line and The well is 1650 feet from (E) (W) line of the section. and 2200 (Give location from section line, cross out wrong directions.) X Distance and direction from nearest town 10 MILES WEST OF CURRANT NV If patented land, Fee Owner is Section 12 Fee Owner Address Locate well correctly. If government land, lease serial No. is N1134A Land Type: Federal (BLM, USFS, etc.) Private State Lessee is MAKOIL INC Address 25391 COMMERCENTRE DR #120 LAKE FOREST, CA 92630 ⊠ No Is the proposed well being considered for unconventional well stimulation? It is proposed to drill the well to a depth of 5000' feet using a rotary rig. The elevation is 4790' feet above sea level. The KB will be 14' If this is a wildcat well, attach plat by licensed surveyor showing location. The status of a bond for this well is conformance with NRS 522.230 of the Nevada Revised Statues is: CURRENT If bond posted with U.S. Government, what is name of surety company? **RLI INSURANCE** Bond number? RLB0005804

Form 2 - NDOM APD 12-23X-15

Please be advised: NAC 522.540 Confidentiality of well records. 1. Records concerning a well will not be kept confidential by the division unless the owner of the well requests confidentiality in writing or marks "confidential" on the logs of an exploratory well. Upon receiving such a request or log, the division will keep the records confidential for 6 months after their receipt unless the owner provides a written authorization for an earlier release.

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I certify that I have personal knowledge of the facts above stated and that they are true, correct, and complete. Signed			
		Name JAMIE DRAYTON	
		Position FIELD OFFICE MANAGER	
		Date 03/10/	, 20_15
Permit No. 968 API No. 31-033-05427 Approval Date 6-12-20/5 By			
CONDITIONS OF PERMIT 1. Please send daily drilling reports to : Lowell Price			
2. See attached "Conditions of Approval."			
3. Additional Conditions/Comments			
A.			
В.			
C.			
lands.		he right of ingress and egress on public, private	
101100	The issuance of this permit does not waive	the requirements that the permit holder obtain of	her permits

from State, Federal, and local agencies.

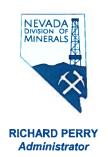


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DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.nv.gov/

Las Vegas Office: 2030 E. Flamingo Rd. #220, Las Vegas, NV 89119 Phone: (702) 486-4343; Fax: (702) 486-4345



CONDITIONS OF APPROVAL FOR CONVENTIONAL WELLS (ADDITIONAL CONDITIONS OF APPROVAL MAY BE REQUIRED)

Operator:

Makoil

Lease Name:

Munson Ranch

Well:

12-23X

A COPY OF THESE CONDITIONS OF APPROVAL MUST BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

Submit forms and correspondence to:

Nevada Division of Minerals

400 W. King Street

Suite 106

Carson City, NV 89703

Communications with the Division shall be directed to:

Lowell Price, Oil, Gas and Geothermal Program Manager

Office 775-684-7045

Email lprice@govmail.state.nv.us

Cell 775-721-1774 Fax 775-684-7052

Richard M. Perry, Division Administrator

Office 775-684-7045

Email rmperry@govmail.state.nv.us

Cell 775-721-0282 Fax 775-684-7052

Voicemail is available on all cell phones and office phones. Please leave a message if you are unable to speak to someone and we will return your call as quickly as possible.

By provision of the current Memorandum of Understanding between NDOM and BLM, you may contact the following individuals for information or approvals <u>if</u> necessary. Approvals under the MOU apply to Fee and Federal lease locations.

John Menghini, Fluid Minerals Team, Petroleum Engineer, BLM Reno

Office 775-861-6573

Email John Menghini@blm.gov

Cell 775- 223-1359 Fax 775-861-6711

YOUR APPLICATION TO DRILL THE 'Munson Ranch 12-23X' WELL IS APPROVED SUBJECT TO THE FOLLOWING PERMIT CONDITIONS

- 1. Approval of this APD does <u>not</u> warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. In addition, approval of this APD does <u>not</u> imply that the operator has legal access to the drilling location. When crossing private surface and when crossing public surface off-lease the operator must have an approved right-of-way.
- 2. All operations shall conform to the Nevada Division of Minerals Oil and Gas chapter 522 Oil and Gas General Provisions, where this includes changes enacted into law on October 24, 2014, see attached.
- 3. A complete copy of the approved drilling permit must be at the drill site during the construction of the roads and drill pad, the drilling of the well, and the completion of the well.
- 4. The Oil, Gas, and Geothermal Program Manager with the Nevada Division of Minerals will be notified 24 hours prior to spudding well by either telephone or email.
- 5. Verbal notification shall be given to the Nevada Division of Minerals Oil, Gas, and Geothermal Program Manager at least 24 hours in advance of running and cementing casing (other than conductor casing), BOPE tests, and formation integrity tests (FIT). BOPE pressure curves, or test charts, are to be submitted to the Nevada Division of Minerals Oil, Gas, and Geothermal Program Manager by email at the completion of testing.
- 6. Surface casing is to be cemented to the surface. If cement does not completely circulate back to the surface, distance to the top of the cement is to be measured in the annular space and reported to the Nevada Division of Minerals Oil, Gas, and Geothermal Program Manager. A cement top job of the open annular space will be required. A sonic cement bond log (CBL) covering the surface casing from its casing shoe to the surface may be required by the Administrator, or Deputy Administrator, in the event significant loss of cement occurs during the cementing of the surface casing, as indicated by the amount of top job required. The CBL will be run over the surface casing prior to, or at, the next bit run in the intermediate bore hole, if required by the Administrator or Deputy Administrator. In the event a CBL does not show the needed clarity of cement occupying the annular space, the Administrator, or Deputy Administrator, may also require an ultrasonic cement bond log to be run. Digital copies of the cement bond log(s) and integrated interpretive log(s) will be provided to the Nevada Division of Minerals Oil, Gas, and Geothermal Program Manager as soon as digital versions are available.
- 7. The intermediate casing string is to be cemented a minimum of 500 feet above the intermediate casing shoe, or 500 feet above any identified hydrocarbon bearing zone, whichever is shallower. Additional cementing requirements may be invoked if the Administrator, or Deputy Administrator, of the Nevada Division of Minerals deems necessary.
- 8. The production casing string is to be cemented to a minimum of 500 feet above the top zone of potential hydrocarbon interest.
 - a. In the event of a production liner is hung from either the intermediate casing or production casing, a minimum of 100 foot overlap is required between the production or intermediate casing shoe and the top of the production liner.
 - b. The operator shall cement the liner to a minimum of 500 feet above the potential zone of hydrocarbon interest.

- 9. Pressure curves for Blowout Prevention Equipment (BOPE) and Formation Integrity Tests (FIT) are to be submitted via email to the Nevada Division of Minerals Oil, Gas, and Geothermal Program Manager at the conclusion of the testing. Results of BOPE tests must be approved by NDOM prior to drilling out of the shoe.
- 10. The Nevada Division of Minerals will be included on the daily morning operational report distribution list during the drilling/completion of the well, starting on spud date and through date of drill rig release, or date of completion rig and/or completion equipment release, whichever occurs last. The operational morning report is to be emailed to Lowell Price lprice@minerals.nv.gov) and Linda Wells (lwells@minerals.nv.gov). The operational morning reports will include date of report, the spud date, casing information such as size, grade, weight, hole size, setting depth, and as needed, the amount and type of cement used, top of cement, depth of cementing tools, casing test method, as well as lithological descriptions of section drilled; intervals perforated, tested, acidized, fractured and results obtained; and the dates all work was performed.
- 11. Any changes in the drilling and/or completion program require approval by the Administrator, or Deputy Administrator, of the Nevada Division of Minerals prior to any work being performed related to the change in operation. A sundry notice and the proposed change of procedure will be submitted to the Nevada Division of Minerals for approval. The submission of the sundry notice and the proposed change of procedure can be submitted by email. Changes in drilling program would include, but not limited to, intervals proposed to be perforated, tested, acidized, and fractured.
- 12. Directional surveys (inclination and azimuth) are to be run at a minimum of every 500 feet. If the inclination of a previously approved vertical wellbore exceeds 10° directional surveys (inclination and azimuth) will be required at a minimum of every 250 feet. The operator must bring the wellbore back to as close of a vertical position below spud location as possible. If the wellbore or projected bottom hole location is found to be within the required 330 feet setback distance from a quarter/quarter section line or lease/unit boundary, direction surveys (inclination and azimuth) are to be run at a minimum of every 100 feet. The operator must bring the wellbore back to outside the required setback distance of 330 feet, or as approved by the Division of Minerals, and then bring the wellbore back to as close of a vertical position below spud location as possible.
- 13. A Hydrogen Sulfide (H2S) Contingency Plan will be submitted when required by the Nevada Division of Minerals. However, minimum safety precautions must be taken at all times. Personal safety equipment, including a portable hydrogen sulfide detector situated in a position to detect gas from the well must be on location. If company policy requires a higher standard, the operator will supply the Nevada Division of Minerals with a copy of the company plan or requirement, if not already submitted.
- 14. A Well Completion Report will be filed with the Nevada Division of Minerals within thirty (30) days of the completion of drilling operations/release date of drill rig. If the well is to be completed prior to the drill rig being released, the Well Completion Report is due within thirty (30) days after completion operations are completed and drill rig is released. If a completion rig and/or completion equipment is brought onto location at a later date to complete the well, an amended Well Completion Report is to be filed with the Nevada Division of Minerals within thirty (30) days after completion rig and/or completion equipment is released. A complete set of daily operational reports are to be submitted with each Completion Report for the time period covered.
- 15. Two copies of all logs run on the well and one copy of the computed logs in electronic format such as LAS, are to be submitted to the Nevada Division of Minerals within 30 days of the date of being run. Two copies of the mud log are to be submitted within 30 days of the completion of drilling operations. Any data the company wants to remain confidential for a period of six months after drilling rig is released must be marked as "Confidential", or a separate written request for all of the well's down hole data to remain confidential for the six month period can be made to the Nevada Division of Minerals.

16. The State of Nevada (NAC 522A.215) - Cuttings - requirements for permit. Samples of cuttings shall be collected and submitted to the Nevada Bureau of Mines and Geology (NBMG). The Nevada Division of Minerals conditions of approval further require a minimum of 30-foot sample intervals from surface to the surface casing shoe and 10-foot intervals from the surface casing shoe to total depth.

TWO separate sets of cuttings are to be sent prepaid to the Great Basin Science Sample and Records Library, Nevada Bureau of Mines and Geology, 2175 Raggio Parkway, Reno, Nevada 89512. For more information call 775-682-8766 or e-mail nbmg@unr.edu.

EACH SET is to consist of at least 15 milliliters of cuttings per sampling interval that must be cleaned, dried, and placed into 3"x5" sample envelopes. The envelopes are to be placed in order by interval into common drill boxes with the approximate dimensions of 3"x5"x20". The envelopes are to be identified by the Nevada Division of Minerals permit number, well name/number as noted on the Application for Permit to Drill an Oil or Gas Well (Kettleman number alone will suffice if given), and depth interval.

The sets are to be PROPERLY INDENTIFIED as follows: Each box is to have legibly written on one end the name of the operator and well as noted on the Application for Permit to Drill an Oil or Gas Well, Division permit number, total interval (missing intervals noted), and set number.

NOTE: the cuttings are <u>not</u> to be sent to the Nevada Division of Minerals. The cuttings are due within 15 days of completion of the well. The operator will be responsible for the cost of any further handling of the samples by NBMG required to meet standards set out in this permit condition.

- 17. Any production of oil and/or gas will be reported on the Nevada Division of Minerals Oil and Gas Operator's Monthly Report, starting with the month in which production operations commence and continuing each month until the well is physically plugged and abandoned. The Oil and Gas Operator's Monthly report is to be filed with the Nevada Division of Minerals, along with the Administrative fee, by the last day of the month following the month for which production occurred.
- 18. All wells, whether drilling, producing, suspended or abandoned shall be identified by a sign or marker with the name of the operator, the well number, and the surveyed description of the well. The sign or marker will also have the BLM lease serial number if the well is located on or enters a Federal lease at depth.
- 19. No well abandonment operations will be commenced without the prior approval of the Nevada Division of Minerals. A sundry notice along with the plugging and abandonment procedure will be submitted to the Nevada Division of Minerals for approval.
- 20. Upon completion of approved plugging, a well identification marker will be erected at the well site location. The following information will be permanently placed on the marker: operator name, well name and number, location by quarter/quarter section, township, range, and federal lease number (if location is on a federal lease, or if wellbore enters a federal lease at depth).
- 21. A Well Plugging Report (Form 12) will be submitted within thirty (30) days following the actual plugging of the wellbore.
- 22. Any venting or flaring of gas during drilling or initial well evaluation tests will be conducted in accordance with Nevada Division of Minerals regulations and the Nevada Division of Environmental Protection regulations.

- 23. Lessees, operators, have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which conforms to applicable State of Nevada laws and regulations, as well as Federal laws and regulations if exploration, development, production, and construction operations are being conducted on, or impact, a Federal lease.
- 24. All undesirable events (fires, accidents, blowouts, spills, and discharges) will be orally reported to the Oil, Gas, and Geothermal Program Manager, or the Administrator of the Nevada Division of Minerals immediately. These events will be followed with a written report within fifteen (15) days. The Nevada Division of Environmental Protection will also be notified of blowouts and abnormal surface spills and discharges through their 24 hour telephone notification hotline (in-state 1-888-331-6337, out of state 1-775-687-9485).
- 25. The enclosed Abandoned Mine brochures shall be posted in common personnel areas at the well site. The operator shall inform all drilling personnel and contractors associated with the drilling of the well of potential dangers, including bodily injury and death, associated with the exploration of abandoned mine workings, as well as the disturbance of possible bat habitats.